



US 20060265052A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2006/0265052 A1**
You (43) **Pub. Date: Nov. 23, 2006**(54) **DEPLOYABLE STENT****Publication Classification**(75) Inventor: **Zhong You**, Oxford (GB)(51) **Int. Cl.***A61F 2/88* (2006.01)*A61F 2/90* (2006.01)(52) **U.S. Cl.** **623/1.22; 623/1.15**

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(63) Continuation-in-part of application No. 10/473,232, filed on Dec. 16, 2003, now Pat. No. 7,060,092, filed as 371 of international application No. PCT/GB02/01424, filed on Mar. 27, 2002.

(30) **Foreign Application Priority Data**

Mar. 29, 2001 (GB) 0107910.2

(57)

ABSTRACT

A stent 1 comprises a sheet 2 of biocompatible material having a tubular shape and folded with a pattern of folds allowing the sheet 2 to be collapsed for deployment. The pattern of folds comprises a unit cell repeated over the sheet 2. The unit cell comprises: two longitudinal folds extending away from a common point along the tubular shape of the sheet, the first longitudinal fold being of the first type and the second longitudinal fold being of the second type; an outer circumferential ring of four edge folds of the first type, comprising, on each side of the longitudinal folds, a minor edge fold extending from the outer end of the first longitudinal fold and a major edge fold extending from the outer end of the second longitudinal fold, the outer ends of the minor edge fold and the major edge fold on the same side of the longitudinal folds intersecting one another; and two angular folds of the second type, each extending from the intersection of a major edge fold with a minor edge fold to the common point from which the longitudinal folds extend. The stent 1 prevents tissue in-growth because it is formed of a continuous sheet 2.

